PAPER TIGERS: IS CURRENT ARMY UNIT COMBINED ARMS TRAINING PREPARING COMPANY COMMANDERS TO FIGHT A COMBINED ARMS BATTLE

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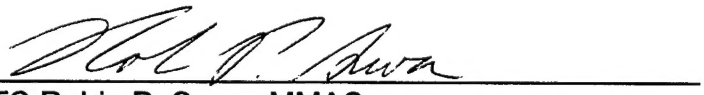

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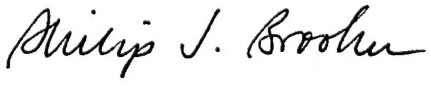

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ABSTRACT

Paper tigers: Is Current Army Unit Combined Arms Training Preparing Company Commanders to Fight a Combined Arms Battle? by Major Chris R. Toner, USA, 66 pages.

The combined arms training experience that evolved from the doctrinal adoption of the Airland Battle and the series of training doctrinal manuals (FMs 25-100 and 25-101) provided for the experiential development of combined arms leaders. Training focused on combined arms training and the incorporation of the combined arms force. Operations tempo (OPTEMPO) and resourcing has shifted the focus on collective training above the platoon level to small unit training at the platoon and squad level. This focus is at the expense of the development of company commanders who are proficient in combined arms warfighting.

This monograph examines current company combined arms training in selected United States Army Infantry battalions. It answers the question: Is current unit combined arms training preparing company commanders to fight a mid to high intensity combined arms battle? In an effort to focus on the experience pillar of Army doctrinal training, company collective training is examined to determine if company commanders are being prepared to fight a mid to high intensity combined arms battle. The focus is on combined arms live fire exercises, external evaluations, combat training center rotations, sustainment training, and multi-iteration training. Unit training directives and guidance are compared against Army doctrinal training manuals and selected criteria to quantitatively determine the level and extent of unit training.

This monograph concludes that company commanders are not being prepared to fight a mid to high intensity combined arms battle. The effects of diminished resources, operations tempo, and Army officer management timelines are effectively preventing the warfighting development of company commanders. This monograph recommends a model training strategy that will help develop the critical skills company commanders require for combined arms warfighting.

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"The Army training mission is to prepare soldiers, leaders, and units to deploy, fight, and win in combat at any intensity level, anywhere, anytime."[1]

I. Introduction

The combined arms training experience that evolved from the doctrinal adoption of the Airland Battle and the series of training doctrinal manuals (FMs 25-100 and 25-101) provided for the experiential development of combined arms leaders. Training focused on combined arms training and the incorporation of the combined arms force. Company teams and battalion task forces engaged in field training exercises designed to develop commanders who could synchronize the efforts and effects of their combined arms units. Commanders, through field experience, learned how to effectively control a combined arms unit to place the maximum amount of combat power against the enemy. Training emphasized collective combined arms training at the company through brigade level. The result was the empirical development of commander's and staff officers who routinely practiced and continually planned for the employment of the combined arms team.[2]

A well resourced eighteen division U.S. Army, focused on a Central European threat and tasked with a small peacekeeping requirement, produced an army well prepared for combined arms warfare in a mid to high intensity environment. This Army demonstrated its combined arms proficiency during the Gulf War.[3] Post Gulf war training has become a product of ever increasing peacekeeping requirements, diminishing resources, and a disproportionate focus on individual and small unit training.

Operations tempo (OPTEMPO) and resourcing has shifted the focus on collective training above the platoon level to small unit training at the platoon and squad level. This focus is at the expense of the development of company commanders who are proficient in combined arms warfighting.[4] Peacekeeping operations involve small units and decentralized operations that demand proficient squads and platoons. They do not demand companies that can execute combined arms combat operations.[5] Colonel Gregory Fontenot, former Brigade Commander in Bosnia from December 1995 to December 1996, had this to say:

"Bosnia made good platoon leaders and pretty effective TOCs. At TF and Brigade you also learned a lot about managing FA and FA radars. However, collective skills at Company and higher for high intensity eroded. The damage done is that I had two generations of platoon leaders who did not do a high intensity rotation at Hohenfels or a table twelve gunnery. I had some company commanders who had the same experience. Can't say what that will cost us."[6]

Current Army officer professional management complicates the warfighting development of company commanders. Company command tours average twelve to eighteen months. Current Army training cycles, CTC rotational programs, and peacekeeping requirements, exacerbate the problem and combine to effectively diminish the combined arms experience of these officers.

FM 22-100 categorizes leader development into three equally important pillars: school training, self –development, and experience.[7] This monograph is solely focused on the experience pillar. Specifically, the experience gained through the conduct of collective company training. It discusses several unit training strategies that will prepare company commanders to fight a combined arms battle.

First, that commanders must lead their company in night combined arms live fires to develop the skills necessary to apply all elements of combat power in a mid to high intensity combat environment. Properly resourced and executed CALFEXs closely replicate battlefield conditions. They develop the confidence and proficiency in the coordination, control, and synchronization of combat power on the battlefield. Live fires are a critical link in providing leaders with an understanding of the danger, confusion, and speed of combat operations. Night conditions serve as one of the most demanding conditions that company commanders will face on the battlefield. Testimony to this is the fact that most units consider a unit as "trained" only when they have successfully completed a METL task during night conditions.[8]

Second, commanders must experience the training environment replicated at CTCs or EXEVALs to experience training in a stressful, near – combat environment. Both provide realistic integration and portrayal of the combined aspects of war and include a element not found in CALFEXs – an uncooperative opposing force.[9]

Third, commanders must sustain the proficiency, developed during these collective events, between training cycles. Because these leader skills are highly perishable, commanders must sustain proficiency between training events through the use of simulations, Tactical Exercises Without Troops (TEWTs), Fire Support Coordination Exercises (FSCXs), etc. This is paramount to the retention of skills necessary to execute combined arms operations.[10]

Fourth, the theory exists that multiple iterations are required to attain leader proficiency in complex collective tasks. For example, most unit training regulations require a unit to undergo a day observed blank fire exercise, day live fire exercise, and night blank fire exercise before executing a night live fire exercise.

The unit and leader must demonstrate their proficiency during each step before moving to the next. This demonstrates that it is an accepted training standard that multiple iterations lead to the necessary proficiency to execute the most demanding collective tasks.[11]

This monograph is a study of current unit combined arms training and whether or not it is preparing company commanders to fight a combined arms battle. The research question this monograph answers is: Is current unit combined arms training preparing company commanders to apply combat power during mid to high intensity combat operations? This monograph examines this question by defining tasks specific to the combined arms battle, identify current doctrinal training methods, analyze current Army company level training programs and OPTEMPO effects, and finally offer conclusions and recommendations.

II. Doctrinal Training Development of Company Commanders

"Captains – fight... that's who delivers upon the enemy the combat power that the upper levels have put together." [12]

As the basis for this study, it is necessary to outline the doctrinal development of Army training as it relates to the determination of the critical leader tasks a company commander requires to be a proficient combined arms warfighter. This chapter will discuss this doctrinal development, define key terminology, and lay the basis for criteria that will be used to analyze current company commander development by empirical exposure to combined arms training.

A. Army Doctrinal Training

The Army's doctrinal training manual, FM 25-100 defines training as "the means by which the Army's quality soldiers and leaders develop their warfighting proficiency and exercise the collective capabilities they will require in combat."[13] To facilitate the development of standard, realistic, and focused training, the Army developed nine principles of training. Four of these principles are used in the following chapters as criteria to determine the type and frequency of combined arms training required to develop company commanders who are proficient combined arms warfighters.[14]

B. Nine Principles of Training

The nine principles of training, as outlined in FM 25-101, are doctrinal fundamentals to effective unit training.[15] Unit training that is designed to develop soldiers and leaders warfighting capability.[16] Of these nine, four principles provide the framework as criteria used to measure effective combined arms training.

The first of these principles of training is to train as a combined arms and services team. FM 101-5-1 defines combined arms as "the synchronized or simultaneous application of several arms, such as infantry, armor, engineers, air defense, and aviation, to achieve an affect on the enemy that is greater than if each arm was used against the enemy in sequence."[17] A combined arms team is defined as: "two or more arms mutually supporting one another, usually consisting of infantry, armor, cavalry, aviation, field artillery, air defense artillery, and engineers." [18] It further defines a Company Team as: "a combined arms team formed by attaching one or more nonorganic tank, mechanized infantry, or light infantry platoons to a tank, mechanized infantry, or light infantry company either in exchange for or in addition to organic platoons."[19]

Doctrinally, the Army conducts combat operations as a combined arms team. This produces a force that combines the effects of combat power against an enemy force. When combined effectively, the effect is devastating on the enemy. It causes confusion, paralyzes the enemy's response, demoralizes, and destroys enemy equipment and personnel. "Army forces overwhelm the enemy's ability to react by synchronizing indirect and direct fires from ground and air-based platforms; assaulting with armor, mechanized, air assault, and dismounted units, concealing friendly operations with obscurants; and attacking from several directions at once."[20] The application of combined arms in this manner is complex and demanding. "It requires detailed planning and violent execution by highly trained [leaders] and units who have been thoroughly rehearsed."[21] In order to be an effective combined arms warfighter, a company commander must lead his company in training as part of a combined arms team "often enough to sustain combat proficiency."[22]

This training method creates leaders who are confident in their ability to mass the elements of combat power against the enemy.[23] Combat power can be defined as the elements of maneuver firepower, protection, and leadership. The company commander "maneuver's" his company by directing "the movement of combat forces to gain positional advantage, usually in order to deliver – or threaten delivery of – direct and indirect fires." [24] To define this in support of criteria for this monograph, this is the company commander's ability to position (direct the employment based on enemy positioning, enemy reaction, and terrain) three to four platoons while simultaneously coordinating supporting direct and indirect fires, attack helicopters, and close air support. Maneuver is the means of positioning forces at decisive points to achieve surprise, psychological shock, physical momentum, massed effects, and moral dominance. Successful maneuver requires anticipation and mental agility. Mental agility enhanced through realistic training that is executed to standard.[25]

"Firepower provides destructive force; it is essential in defeating the enemy's ability and will to fight. It is the amount of fire that may be delivered by a position, unit, or weapon system. Firepower may be either direct or indirect."[26] To define this in support of criteria for this monograph, this is the company commander's ability to plan for, coordinate, and control supporting direct and indirect fires, attack helicopters, and close air support.

"The most essential dynamic of combat power is competent and confident officer and noncommissioned officer leadership. Leaders determine how maneuver, firepower, and protection are used, ensuring these elements are effectively employed against the enemy."[27]

To define this in support of criteria for this monograph, this is the company commander's demonstrated proficiency to execute assigned METL tasks to Army standards.

Combined arms training integrates the effects and capabilities of combat, combat support, and combat service support units in training conditions that replicate battlefield conditions. This integration of units in a synchronized operation characterizes the Army's doctrine of how to fight. For the purpose of this monograph, this training would include Combined Arms Live Fire Exercises (CALFEXs), Live Fire Exercises (LFXs), and Field Training Exercises (FTXs).[28]

A second principle of training is to train as you fight. This principle demands training that replicates, as closely as possible, the conditions found in a combat environment. This means conducting CALFEXs, LFXs, and FTXs in a simulated combat environment, "not in the classroom."[29] Conditions include incorporating realistic battlefield noise and obscuration, loss of key leaders, casualties, limited visibility operations (night), force-on-force training that includes an "enemy" force that is uncooperative, civilian and media role players, and a variety of terrain (desert, forest, urban, etc.).[30] This is a challenging process but extremely important because it allows units to prepare for combat, in realistic conditions, prior to executing combat operations. The "more training resembles combat, the more we do to get our forces ready for that ultimate test [combat]."[31]

A third principle of training is to conduct performance-oriented training. Performance oriented training places an individual or unit in a realistic training environment where the individual or unit must perform to specific standards. It is a "hands-on" approach where actions and demonstrated capability replace oral and written examination.

The Army describes this methodology as the "crawl, walk, run" method of training. A unit or individual starts at a very basic level of training (crawl), demonstrates proficiency at that level before progressing to the next level (walk), and then advances to the Army standard level (run).[32] While conducting CALFEXs, LFXs, and FTXs, training is executed, performance assessed, and retraining occurs if the task(s) are not performed to standard. Retraining occurs until the standard(s) for the task(s) are met to ensure that the standard(s) can be met "under the most difficult of wartime conditions."[33] Soldiers and leaders learn best from doing. That is performing a task under realistic conditions as they would in the event of combat operations. This principle of training supports the theory that multiple iterations of training are required for company commanders to develop proficiency at the application of combat power during combat operations.

A fourth principle of training is to train to sustain proficiency. As leaders and their units attain proficiency at tasks during training, they then must sustain this proficiency. This is accomplished by continued collective and individual training designed to repeat critical tasks at a frequency necessary for sustainment.[34] Sustainment training prevents the eroding of critical skills between training events. It sustains a unit's ability to accomplish their wartime tasks and prevents the unit from relying on "infrequent peaking" in an attempt to maintain wartime proficiency.[35]

Company commanders sustain proficiency in executing combined arms collective tasks by participating in Fire Support Coordination Exercises (FSCXs), Tactical Exercises Without Troops (TEWTs), and tactical training simulations.[36]

C. Deriving Company Commander Leader Tasks From Selected METL Tasks

Battle focused training was first described in the 1988 Army FM 25-100, Training the Force. It is a concept that "is used to derive peacetime training requirements from wartime missions."[37] Battle focus is critical in the development of the tasks that units concentrate their training programs on. This concept was developed in an attempt to concentrate unit training on those tasks that they were most likely to execute as part of a combat operation. Units used their wartime missions they derived from assigned war plans, any external directives that related to wartime missions, and through a commander's analysis derived a Mission Essential Task List or METL.[38]

Mission Essential Task List development allows a commander to focus training time, resources, and effort on only those tasks necessary to accomplish assigned wartime missions.[39] It also "enables a commander to tailor unit development training for those leader competencies required to execute Army warfighting doctrine."[40] He does this by deriving from his METL the combat leader tasks specific to combined arms warfighting and focusing his leader and unit training to develop these skills.

The combat leader tasks required of a company commander are complex and require structured, realistic, and demanding training that incorporates all of the available elements of combat power. The skills a company commander would require in combat have been derived from the doctrinal development of training and can readily be ascertained in the Army's Mission Training Plans.[41]

MTPs describe performance oriented training to facilitate the development of unit training plans. They contain collective tasks that support a unit's METL and detail the specific Army standards the unit must meet when executing the task(s).

Embedded in these collective tasks are the leader tasks that must occur to ensure Army standards are met.[42] These tasks routinize the extremely complex environment of warfighting. While it is safe to say that an individual soldier may have several fairly simple tasks to perform during a specific combat mission, the company commander must perform individual tasks simultaneously, "along with several other collective tasks, under the most demanding conditions imaginable. This ability is achieved through tough and realistic training."[43]

So what does the company commander do? Why is it important? The MTPs form the doctrinal basis for deriving the leader specific tasks the company commander must perform during combined arms combat operations. The company commander is the leader of an organization, as implied in the quote at the beginning of this chapter, who directs platoons, and sometimes squads, and sections in the conduct of battle. It is the lowest organization in the Army that contains a headquarters element responsible for planning, coordinating, and controlling the application of combat power during combat.

The company commander is responsible for directing and controlling the maneuver, direct fire, and indirect fire assets organic and attached to his company.[44] While actual mission requirements will determine exactly what assets the company commander will have assigned to his company, for the purpose of definition in this monograph this includes at least three platoons (this could be a mix of light infantry, mechanized infantry, or armor), organic fire support (company or battalion mortars), combat engineers, air defense artillery, and medical personnel. The conditions under which the company commander accomplishes the command and control of these units can be described as nothing short of chaotic.

Noise, fear, casualties, inaccurate reports, and confusion combine to form an environment contrary to order and systematic decision making.[45] Experienced combat leaders agree that the "command and control of company team operations during combat is extremely difficult. The task itself is complex."[46] The desired endstate in the efforts of the company commander is the application of combat power against the enemy at the desired point and place in time.

Company commanders have a critical role in the application of combat power, because prior to the battle "only capability or combat potential exists."[47] A skilled company commander, trained to proficiency in the application of available combat power, "can turn combat potential into real combat power."[48] When combined effectively, combat power prevents the enemy from responding with coordinated or effective opposition. The end state in applying overwhelming combat power at the decisive point and time is victory at minimal cost.[49] The leader skills the company commander develops and brings to the fight are the critical determinant in effectively applying this combat power.

Based on the METL tasks listed in Appendix 1 and the METL to company commander leader tasks derived from the MTPs as identified in figure 1, the following leader skills are specific to warfighting at the company level during mid to high intensity level combat:

1. Plan, coordinate, and control organic direct fire.
2. Plan, coordinate, and control indirect fire.
3. Plan, coordinate, and control Attack helicopter and CAS.
4. Integrate combat engineer assets.
5. Integrate Air Defense Artillery assets.

6. Plan, coordinate, and control resupply and casualty evacuation.

7. Perform Combat Service Support Operations, Treat and Evacuate Casualties.

(The tasks perform CSS operations and treat and evacuate casualties are included because the company commander must allocate personnel, equipment, and time to complete the tasks in accordance with Army standards. All of this would occur before, during, and after executing a METL task during combat operations.)

COMPANY METL TASK	COMPANY COMMANDER TASK
Take Actions on Contact, Execute Attack, Perform overwatch/Support by fire, Execute Assault, Execute Defense, Employ Fire Support, Breach an Obstacle,	Plan, coordinate, and control organic direct fire
Take Actions on Contact, Execute Attack, Perform overwatch/Support by fire, Execute Assault, Execute Defense, Employ Fire Support, Breach an Obstacle,	Plan, coordinate, and control indirect fire
Execute Attack, Execute Assault, Execute Defense, Employ Fire Support,	Plan, coordinate, and control Attack helicopter and CAS
Execute Attack, Execute Assault, Execute Defense, Breach an Obstacle,	Integrate combat engineer assets
Take Actions on Contact, Execute Attack, Execute Assault, Execute Defense, Breach an Obstacle, Defend against Air Attack,	Integrate Air Defense Artillery assets
Take Actions on Contact, Execute Attack, Perform overwatch/Support by fire, Execute Assault, Execute Defense, Employ Fire Support, Breach an Obstacle, Perform Combat Service Support Operations, Treat and Evacuate Casualties	Plan, coordinate, and control resupply and casualty evacuation

Figure 1. Company Commander Tasks derived from Company METL.[50]

III. Training Strategies to Prepare Company Commanders to Fight a Combined Arms Battle

"It takes more then just a CTC rotation to properly develop a leader in warfighting skills. The real training occurs through home station training with proper, focused mentoring and coaching by seasoned leaders and adequate time in the dirt working through the fundamentals."[51]

This chapter's purpose is to determine training strategies that develop company commander's proficiency in executing complex METL tasks. These training strategies are identified through the analysis of current Army training methods, CTC unit performance data, and specified Army training requirements. The end state of this chapter is the quantification of the criteria that will be used in chapter IV to determine if current Army combined arms training is preparing company commanders to fight a combined arms battle.

Chapter II highlighted several different training events that company commander's experience in their progression towards proficiency as combined arms warfighters. CALFEXs, LFXs, CTCs, EXEVALs, FTXs, FCXs, TEWTs, various simulations, and leader training all combine to develop and sustain the leader tasks required to become proficient in executing combined arms combat operations. The primary differences between each of these events are the resources required to execute the event and the level of combat realism of each event. Figure 3-1 graphically presents the realism-to-resource environment of these training events.[52]

This graph portrays the level of intensity, resource commitment, and combat realism as the training events climb towards the preparation for war.

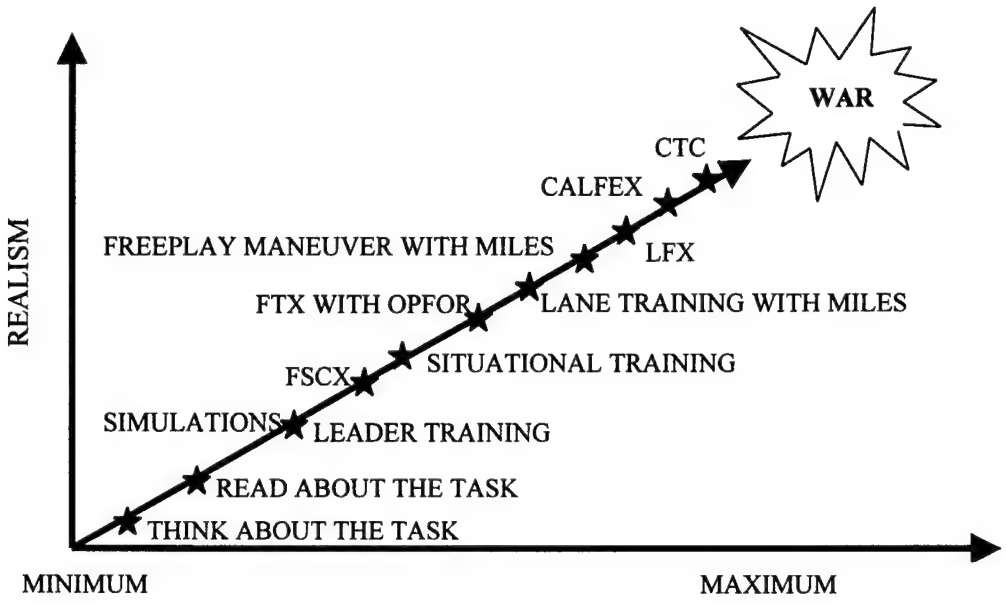

Figure 3-1

A. Training Strategies

Training strategies that will help develop company commander's proficiency in executing complex METL tasks are determined through the analysis of current Army training methods, CTC unit performance data, and specified Army training requirements. These training strategies quantify the four criteria used to determine whether or not current combined arms training is preparing company commanders to fight a combined arms battle.

B. Night CALFEXs

The first training strategy supports the criterion that commanders must train at night combined arms live fires to develop the skills necessary to apply all elements of combat power in a mid to high intensity combat environment.

As discussed in chapter II, this criterion is critical because it combines the way the Army fights – as a combined arms team – with the condition that allows the Army to exploit its technological edge – the night. Most commander's agree that subordinate units are not trained to Army standards unless they can execute their METL tasks under night conditions.[53]

Live fires allow units to employ their organic and supporting weapons while executing METL tasks. Combined arms live fires include the additional combat multipliers of artillery, close air support, attack aviation, engineers, and other CS and CSS units. This gives leaders the confidence needed to employ these same combat multipliers during combat operations. A 1997 RAND study on multi-theater war readiness found that there are no "substitutes for company and battalion – level live fire combat training [in the preparation to conduct combat operations].[54]

Army training requirements and unit supplemental training requirements do not require unit's to execute CALFEXs at night, however, FM 25-100 states that " all units in the US Army, not just combat units, must be totally proficient in operating at night… these conditions give units a distinct advantage when executing combat operations."[55]

There is also a need to define the quality of a CALFEX. The short definition is that it should replicate combat conditions as closely as possible. This allows the company commander to execute required leader tasks under the conditions he would most likely face during combat. Incorporation of combat multipliers enables the company commander to face the challenging task of planning, coordinating, and controlling these systems during the execution of METL tasks. STRAC and unit training directives require tank, mechanized infantry, and light infantry companies to participate in a CALFEX at least once per year.[56]

The recommended training strategy that supports this criterion is based on Army training principles, STRAC requirements, and unit training directives. The company commander must, at a minimum, participate in one fully resourced night CALFEX per year.[57]

C. CTCs and EXEVALs

The second training strategy supports the criterion that company commanders must experience the training environment replicated at CTCs or in EXEVALs to experience training in a stressful, near – combat environment.

This criterion presents conditions that closely replicate battlefield conditions. It places the company commander in a dynamic, free play environment where he must make decisions, allocate resources, and coordinate subordinate actions, during the execution of METL tasks.

The Army CTC program provides the "most realistic training environment short of combat."[58] These training centers provide combined arms training "that could not be accomplished at [unit] home stations because of physical limitations and the prohibitive costs of providing a realistic training environment."[59]

During a typical ten to fourteen day rotation (twenty-four hours a day), the unit executes multiple METL tasks against an uncooperative enemy force. The rotation includes all of the combined arms multipliers and replicates or includes logistical constraints, adverse weather, casualty play, and live fire exercises. This not only stresses the sustainment and conduct of operations but also places company commanders in situations where they must execute leader tasks under physical and mental stress.[60]

CTCs were cited by most commanders who conducted combat operations in both Just Cause and Desert Storm as "instrumental to honing warfighting skills."[61] Commanders agreed that the CTCs provided invaluable experience that allowed them to command and control their units effectively during combat operations.[62] Commanders and soldiers also agree that performance at CTCs is a "key indicator of the tactical health of the [unit]."[63]

Currently, the Army Chief of Staff policy states that all battalion commanders will undergo a CTC evaluation at least once during their command tour.[64] There is however, no requirement for company commanders to participate in a CTC rotation. Unit training requirements have recognized this deficiency and require company commanders to receive an EXEVAL at least once every twelve months.[65]

External evaluations conducted by units at their homestations attempt to replicate, as closely as possible, a CTC environment. While these are not designed to totally replace the CTC training experience, they play an important role as an additional tool to develop company commander's warfighting proficiency. EXEVALs provide a training environment where the company commander can execute leader tasks in a realistic combat environment.

Although STRAC does not specifically delineate the requirement and frequency of company EXEVALs, an analysis of battalion EXEVAL requirements and crew level participation as a part of unit EXEVALs, can infer a required training strategy. STRAC requires mechanized infantry battalions to conduct a minimum of two EXEVALs per year.[66] It also requires light infantry M60 machine gun crews and 60mm mortar crews to receive two EXEVALs per year. This infers the same requirement (two) for the EXEVAL of infantry companies.[67]

Current unit training circulars require companies to participate in EXEVALs at least once annually.[68] The recommended training strategy that supports this criterion, based on Army training principles, STRAC requirements, and unit training directives, determine that a company commander must, at a minimum, participate in one fully resourced EXEVALs and/ or CTC rotations per year.[69]

D. Sustainment Training

The third training strategy supports the criterion that company commanders must sustain their proficiency, developed during collective training cycles, in the period between training cycles. Critical skill proficiency decay's rapidly over time when not sustained between collective training cycles.

On average, units spend ten to twelve weeks between major collective training events.[70] To maintain critical leader skills necessary for combined arms warfighting, company commanders must sustain proficiency between these major training events. A 1994 study by the U.S. Army Research Institute for the Behavioral And Social Sciences (USARI), found that units that failed to sustain proficiency between major collective training events performed poorly on tasks that were previously executed to standard. Their conclusion is based on the observation of seven brigade rotations at the National Training Center.

Supporting this finding was the observation, by USARI, of a brigade task force that participated in two NTC rotations in one year. Although they (USARI) take into account personnel turbulence, the study found that the major difference was the train-up that occurred prior to each rotation. In the first rotation, the brigade accomplished three out of four force on force missions.

In the second rotation, the brigade accomplished only one of four. In their comparison of training prior to each rotation, USARI found that the second rotation's homestation training was "hampered by a severe shortage of training resources. Comparing the vehicle mileage for the two rotations reveled that the brigade drove 40% more miles on their M1s in preparation for the [first] rotation. For M2s the preparation for the [first] rotation recorded 200% more miles.[71] The fact that this study compares two comprehensive pre-CTC training programs, demonstrates the rapid degeneration of leader and collective task proficiency that occurs between training events.

Critical to the maintenance of leader tasks is the participation in sustainment training that includes TEWTs, FSCXs, and simulations. USARI studies of collective task performance in light infantry units have determined that "skill decay on collective tasks occur over as little as one month."[72] Currently, the Army does not require specific sustainment training that focuses on these critical leader skills. For instance, it would be difficult to dictate the focus of TEWTs to be conducted between training cycles. TEWTs can have a multitude of training focuses and can be designed to introduce new skills or maintain skills already acquired.

Fire support coordination exercises incorporate the planning, coordination, and control of direct and indirect fires in a reduced scale (participation, resources, time) then executed in a typical CALFEX. Although unit training directives reinforce the Army training principle of sustainment training, only one unit in this study requires FSCXs to be conducted at least once between major training events.[73]

Simulations are effective training tools that can provide quality battle training. They can help sustain leader skills between training cycles and "build leader responsiveness and flexibility"[74] They are also effective in reinforcing proficiency previously attained during major training events.[75]

The recommended training strategy that supports this criterion, based on Army training principles, USARI analysis, and unit training directives, determines that a company commander must, at a minimum, participate in sustainment training between training cycles that includes the performance of those leader tasks outlined in chapter II. This sustainment training strategy is implemented using FSCXs, TEWTs, and simulations.[76]

E. Multiple Training Iterations

The fourth training strategy supports the criterion that company commanders must participate in multiple collective training iterations to attain proficiency in complex collective tasks. USARI studies and CTC performance analysis conclude that multiple iterations of training are required to attain proficiency on complex collective tasks.[77]

In a 1997 RAND study of company performance at the NTC, Bryan Hallmark observed that multiple iterations of tasks allowed a leader to progress from basic comprehensive knowledge to the synthesis of knowledge. His analysis concluded that the desired level of proficiency a leader should attain is the ability to synthesize what they have learned and apply this knowledge accordingly. He defines synthesis as the ability to integrate multiple concepts and generate new solutions to a particular problem. Figure 3-1 illustrates this concept using the task of attack as an example.[78] The company commander begins with a general knowledge of the task based on his prior military experience.

Through repetitive training on the task (application), feedback and observation (analysis), the company commander acquires the ability to integrate multiple concepts that can be applied to changing circumstances (synthesis).

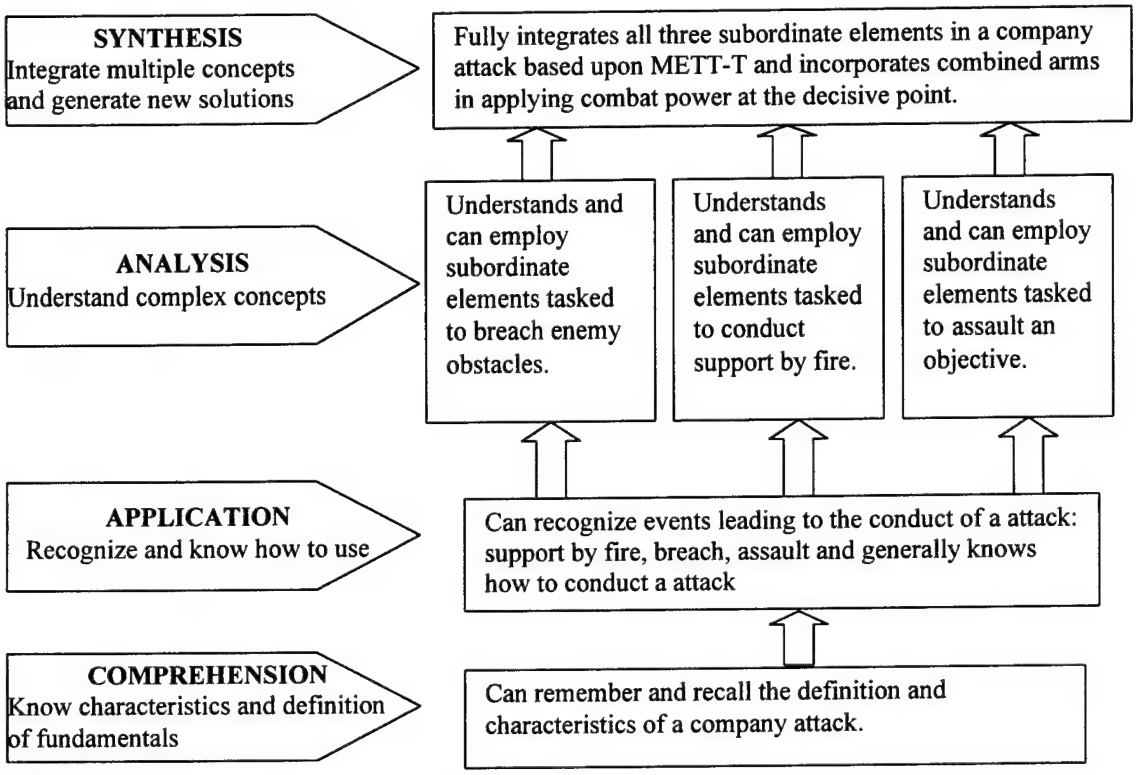

Figure 3-1 Collective Task Learning Model

Carl Von Clausewitz, in his book *On War,* talked about the military commander's ability to rapidly and accurately make decisions during combat. Clausewitz uses the French term coup d'oeil, (literally translated it means in the blink of an eye), to describe a commander's ability to synthesize information and make decisions. As a commander becomes more experienced, he is able to discard the irrelevant information during combat and in "the darkest hour, retain some glimmerings of the inner light which leads to truth."[79]

The recommended training strategy that supports this criterion, based on Army training principles, USARI analysis, and unit training directives, determines that a company commander must, at a minimum, conduct multiple (more then one) collective training events on METL tasks annually.[80] This is not to say that he must conduct multiple iterations on each METL task. He must, however, execute training that will allow him to perform multiple iterations of the leader tasks identified in chapter II.

IV. Current Company Training Strategies

The purpose of this chapter is to compare 1997-1998 company training strategies against the criteria established in chapter III. Selected training strategies in the 82nd Airborne Division, 2nd Infantry Division, 1st Infantry Division (FWD), and the 1st Cavalry Division are analyzed to determine if current combined arms training is preparing company commanders to fight a combined arms battle.

The analysis of these training strategies is made possible by examining the unit(s) training calendars, training guidance, METL, and through telephonic and electronic discussions with leaders assigned to each unit.

A. 2-504th PIR, 82nd AIRBORNE DIVISION

From February 1998 to May 1998 the 2nd Battalion, 504th Parachute Infantry regiment participated in Operation Desert Focus. This deployment consisted of a battalion command and control element and one rifle Infantry Company. Companies that remained at homestation continued to conduct training in accordance with unit training directives.[81] During an eight month, 244 day period, the battalion conducted 39 days of company or higher collective training; 89 days of platoon or below collective training; and 116 days of support taskings or off duty time.[82]

METL. 2-504th PIR maintains the following METL:

BATTALION METL	COMPANY METL
Execute RSOP	Prepare for Combat
Airborne Assault/Seize Airfield	Perform Airborne Assault
Secure a Lodgment	Overwatch/Support by Fire
Attack	Defend a Lodgment
Perform Movement to Contact	Assault
Perform Air Assault	Perform Movement to Contact
Conduct NEO	Perform Logistical Support
Protect the Force	Perform Helicopter Movement
C2 the Battalion	Conduct NEO Marshaling/Security Operations
Perform CSS Operations	Consolidate/Reorganize
	Assault Built-up Area
	Perform Link-up

Training Cycle

In 1998, the 82nd Airborne Division training strategy is based on a six-week, three cycle, training system. This system consists of six weeks each of training cycle, mission cycle, and support cycle. Training cycle is a six week period that is called an "Intensified Training Cycle (ITC)."[83] This cycle focus is on collective training and includes FTXs, LFXs, EXEVALs, CALFEXs, and CTC rotations. This cycle prepares the unit to assume mission cycle as a part of a rapid deployment brigade task force. Mission cycle training focus is at the small unit and individual level. Mission requirements take priority over all other training. The only collective training allowed, is the training that occurs when the unit participates in an Emergency Deployment Readiness Exercise (EDRE). Support cycle follows mission cycle and is focused on supporting higher unit and installation support requirements. The focus of training during this cycle is at the individual level. Collective training does not occur during this period.

This training system allows for two to three ITCs annually. Specifically, the year consists of twelve to eighteen weeks of ITC and thirty to thirty-six weeks of mission and support cycles.[84]

CALFEX

Unit training regulations require companies to participate in a CALFEX annually.[85] The emphasis on conducting quality, well resourced CALFEXs is high. Each CALFEX is a Division resourced event that incorporates as many combat multipliers as possible.[86] CALFEXs habitually combine FA, mortars, engineers, and CSS units as a part of the exercise. Although not consistently used, CAS and attack aviation provide additional support when available.[87] Additionally, the battalion conducts "walk and Shoot" exercises quarterly. This is a LFX where company commanders "plan a mission (offense or defense) and then execute [a LFX using] fire support, CAS, [attack] aviation, with their platoon leaders and forward observers. It is a good event and brigade and division work hard to incorporate AC130s, A-10s, and Kiowa warriors into the LFX."[88]

EXEVAL/CTC

The Division requires Battalion Commanders to receive an EXEVAL or CTC rotation during their command tour. Company Commanders are required to receive an EXEVAL annually. Through 1998, this battalion conducted annual CTC rotations. This provides for the evaluation of companies, annually, at either the National Training Center or the Joint Readiness Training Center.

Sustainment

The Division requires Infantry Battalions to conduct a FSCX prior to assumption of mission cycle.[89] An analysis of a 1998 Brigade training schedule revels the following sustainment training during one mission and one support training cycle (twelve weeks): One battalion Mass Tactical Parachute mission (usually one per month)– this includes a tactical force on force mission, one Joint Readiness Training Exercises that may or may not include execution of maneuver METL tasks, two (five day periods) instances of company level LFXs. All other collective training was executed at the squad through platoon level. Battalion level orders drills and Command Post Exercises were conducted, but the level of participation by company commanders was minimal. Additionally, the execution of those leader tasks identified in chapter II only occurred during the mass tactical airborne operations and company LFXs.[90]

Multi-Iterations

The 82nd training strategy incorporates multi-iteration training primarily due to their readiness requirements. Battalions average at least one mass tactical airborne operation per month. This operation includes a force on force scenario against an uncooperative enemy force.[91] During the ITC, company's conduct LFXs and force on force training on multiple METL tasks. Prior to executing a night LFX, companies are required to demonstrate proficiency during day blank, day live, and night blank fire rehearsals. This method of training reinforces the critical leader tasks and allows the company commander to learn from experience gained during previous iterations.[92]

Criteria Comparison

The unit considers task proficiency as the ability to execute a METL task, at night, to Army MTP standards.[93] Established training directives do not require unit's to execute CALFEXs at night. Sustainment training is alive and well. Units participate in METL collective training during mass tactical airborne operations approximately once per month. Mass tactical airborne operations allow units in the 82nd to conduct battalion collective training approximately once every month.[94] Additionally, FSCXs are required prior to the assumption of mission cycle. There is no evidence that TEWTs and simulations were part of the sustainment training strategy, however, the mass tactical airborne operations fulfill this criterion.[95] Company commanders are receiving multiple iterations of training on critical leader tasks. ITCs enforce the Army performance-oriented training principle and emphasize training to standard – not time. This includes built in pre-training for collective events, observation and assessment, and retraining.[96]

CRITERION	2-504th PIR, 82ND
CALFEX	YES
EXEVALs/CTC	YES/YES
SUSTAINMENT	YES
MULTI-ITERATIONS	YES

B. 1-503rd (AASLT), 2nd Infantry Division

The 1-503rd is a Korean based, air assault infantry battalion. The battalion's training strategy is based on its war focus for a mid to high intensity combat environment.[97]

METL. The battalion in this study maintains the following METL:

BATTALION METL	COMPANY METL
Transition through Crisis/Transition to War	Transition through Crisis/Transition to War
Assault	Assault
Defend	Defend
Conduct MOUT	Conduct MOUT
Perform Air Assault	Perform Air Assault
Sustain the Force	Conduct CSS Operations
Force Protection	Force Protection

Training Cycle

The unit does not conduct training in accordance with the standard training cycle outlined in FM 25-100. Their training cycle is based on gunnery densities and the availability of resources that remain once priority training requirements are filled. There is essentially "little to no [training] cycle system primarily because there is only [one] MPRC (accommodates Tanks, Bradleys, and Infantry "feeder ranges") – and it must be scheduled discreetly for both tank battalions, both mechanized infantry battalions, and the Division Cavalry Squadron."[98]

CALFEX

The unit in this study participates in three gunnery densities each year. During these densities they conduct CALFEXs with select units (depending on the last gunnery). The intent is to give each company a CALFEX twice a year. CALFEXs incorporate combat multipliers that include engineers, FA, mortars, attack aviation, and M1A2 tanks or M2A2 Bradley Fighting Vehicles. Each CALFEXs is executed with either a heavy-light or light-heavy mix of tanks, bradleys, and dismounted infantry.[99]

EXEVAL/CTC

Companies get two EXEVALs annually. This is a brigade resourced/run major training event. "We use a six-day JRTC type continuous search and attack scenario, starting with a big air assault, then us against [enemy] light infantry… we had an OPFOR skilled in playing the [enemy] that gave the rifle units fits."[100]

Sustainment

The sustainment window between company collective training events is small. It consists primarily of squad and platoon level collective exercises. FSCXs are also a training tool that is used often. TEWTs are routinely used to reinforce the real world mission and sustain those leader skills that focus on planning and coordinating combined arms operations. The use of simulations is primarily at the crew level with Unit Conduct Of Fire Trainer (UCOFT).[101]

Multi-Iterations

Each company participates in at least four company and above, force-on-force, combined arms exercises per year. These include " company EXEVALs, platoon EXEVALs (we do them as a brigade-scale JRTC box), battalion/brigade EXEVALs, and OPFOR for [another] brigade/battalion EXEVAL. It works out to once a quarter…"[102] Gunnery exercises (three per year) primarily focus on squad and platoon live fire proficiency but include company CALFEXs.

Criteria Comparison

The unit meets all criteria except one; participation in a CTC rotation. 2ID attempts to fill this void by conducting annual exercises that closely replicate JRTC conditions.

Although the resources and training area prevent exact duplication of a CTC environment, "They're getting much better – this past years was good."[103] Given the amount of time spent on training that relates directly to their wartime mission, they adequately subsidize for this deficiency. The key to the success of their training strategy is the amount of training executed annually with an extremely small sustainment window between training events. This supports the development and sustainment of the critical skills a company commander needs to be an effective combined arms warfighter. This battalion's training strategies enforce the Army performance-oriented training principle and emphasize training to standard – not time. This includes built in pre-training for collective events, observation and assessment, and retraining.

CRITERION	1-503rd (AASLT), 2nd Infantry Division
CALFEX	YES
EXEVALs/CTC	YES/NO
SUSTAINMENT	YES
MULTI-ITERATIONS	YES

C. 1-26 IN, 1st Infantry Division (FWD)

In a period from February 1998 to August 1998 the unit participated in a deployment to Macedonia as a part of Task Force Able Sentry.[104] The Abel Sentry mission involved the entire battalion with the exception of two companies. The two companies that did not deploy, A/1-26 and D/1-26 conducted a gunnery and CMTC rotation respectively. In October 1998, the battalion conducted a gunnery density that included table XII, platoon LFX qualifications.[105] In a six month (181 day) period, the battalion spent 13 days training at the company or higher level, 84 days training at the platoon or below level, and 84 days on support or non-training missions.

METL. 1-26 IN, 1st Infantry Division (FWD) maintains the following METL:

BATTALION METL	COMPANY METL
Deploy the Task Force	Deploy by Rail, Sea, and/or Air
Perform Tactical Road March	Perform Tactical Roadmarch
Occupy an Assembly Area	Occupy an Assembly Area
Move Tactically	Perform Tactical Movement
Attack/Counterattack by Fire	Perform Actions on Contact
Assault	Perform Attack by Fire
Defend	Assault an Enemy Position
Conduct Peace Operations	Support by Fire
Redeploy and Recover the Task Force	Defend
	Redeploy and Recover CO/TM

Training Cycle

The unit cycle system is based on the annual gunnery and CMTC training periods. The schedule is based on the priority for training and contingency mission requirements, that the Division assigns to subordinate units.[106]

CALFEX

In 1998, 1-26 IN has not conducted any CALFEXs and the long range training calendar does not depict scheduled CALFEXs.[107] Additionally, no training strategy exists that incorporates CAS or attack aviation into planned training programs. The focus of live fire training is at the crew and platoon level. Platoons conduct Bradley table XII as part of a "three day war scenario."[108] "The three day war starts with an offensive lane, then defensive lane (both force on force MILES exercises) and culminates with the table XII live fire. That is the only maneuver training that is accomplished in the gunnery density and I would hesitate to call that combined arms because we are never able to leverage the other arms [combat multipliers] into the fight."[109]

EXEVAL/CTC

As of 1998, the unit is attending the CMTC at least once per year. The CMTC offers the only opportunity for company combined arms operations. The rotation to the CMTC includes a five day train-up program hosted by the cadre at the CMTC. The unit then participates in a seven day battalion task force rotation. This twelve day rotation is the major combined arms training event for the year.[110]

Sustainment

Sustainment training at the company level consists only of Simulated Network Training (SIMNET). SIMNET is a company maneuver training simulation that supports sustainment of several company commander critical skills.[111] However, this training occurs too infrequently to fulfill the requirement of this criterion.[112]

Multi-Iterations

During the conduct of operations at the CMTC, the company participates in multiple iterations of training. The unit does not schedule retraining time to retrain on identified weaknesses after the CMTC. Multi-iteration training occurs only at the crew and platoon level throughout the year.[113]

Criteria Comparison

The unit only fulfilled the requirement for one criterion. The training experience gained through the attendance of one annual CTC is probably ineffective given the fact that there is almost no train-up for the rotation, no time scheduled for retraining after the rotation, and no sustainment of critical leader skills between rotations. At the company level, the unit does not sustain training between major training events. The training focus for the battalion remains at the crew and platoon level. The occasional use of SIMNET does not fulfill the requirement of sustainment training.

CRITERION	1-26 IN, 1st Infantry Division (FWD)
CALFEX	NO
EXEVALs/CTC	YES/YES
SUSTAINMENT	NO
MULTI-ITERATIONS	NO

D. 3-8 Cavalry, 1st Cavalry Division

In November 1997 the battalion participated in a NTC rotation. During the period from December 1997 to December 1998 the battalion did not conduct company maneuver training. From December 1997 to December 1998 companies conducted maneuver training in the Close Combat Tactical Trainer (CCTT) which is a company level simulation exercise. The battalion executed a gunnery training density during October 1998. During this density, collective training occurred only at the platoon level. The focus of the battalion training program is clearly at the crew and platoon level.[114]

METL. 3-8 Cavalry, 1st Cavalry Division maintains the following METL:

BATTALION METL	COMPANY METL
Deploy	Deploy
Conduct Family Support Operations	Conduct Family Support Operations
Conduct RSOI	Conduct RSOI
Force Protection	Force Protection
Perform Movement to Contact	Perform Actions on Contact
Conduct Defense	Conduct Support By Fire
Conduct Deliberate Attack	Assault Mounted
Sustain The Force	Assault Dismounted
Redeploy	Defend
Conduct post Combat Operations	
Regenerate Combat Power	

Training Cycle

In 1998, the 1st Cavalry Division assumed the supporting division requirement for the peace keeping mission in Bosnia. This has changed the training cycle system to a system based on the priority training requirements of units programmed to deploy to Bosnia. The unit cycle system is based on the annual gunnery and CTC training periods.[115]

CALFEX

The battalion participated in a CALFEX during the November 1997 NTC rotation. The unit does not require companies to participate in annual CALFEXs. Additionally, no training strategy exists that incorporates CAS or attack aviation into planned training programs. The unit does not currently schedule company CALFEXs as a part of its annual training strategy so the only time a company participates in a CALFEX is during a rotation to the NTC. [116]

EXEVAL/CTC

The battalion averages a rotation to the NTC once per year. This rotation does not include a pre-rotation train-up period nor does it include a post rotation retraining period. EXEVALs are not scheduled, outside of the NTC rotations, on the long range training calendar. [117]

Sustainment

Gunnery focus maintains crew and platoon battle task proficiency. The focus between major training events is also at the crew and platoon level. Companies do not conduct maneuver training between CTC rotations. The battalion does incorporate the use of the CCTT. CCTT allows company commanders to train on critical leader skills, but occurs too infrequently to adequately fulfill the criterion.

"It is actually very good. 360 graphics, real time stuff, NTC data base. [The] mock ups are very close to the real thing. Our center has twelve M2A2s and twenty M1A1/A2s. You can maneuver teams or pure tanks or bradleys. Almost as good as the real thing." [118] The unit schedules the CCTT approximately two weeks every quarter. This provides for the training of two companies every quarter.

Multi-Iterations

NTC rotations include multiple iterations of company level collective training. Between rotations the collective training focus is at the crew and platoon level. Multi-iteration training occurs only at the crew and platoon level throughout the year.[119]

Criteria Comparison

This training strategy lacks emphasis at company combined arms maneuver training. The only time the company commander maneuvers his company is during a CTC rotation. These rotations do not include a train-up period where the combined arms elements can incorporate and train collectively. Based on this training strategy, the company commander maneuvers a company combined arms team once during his command. Additionally, the use and effect of the CCTT is questionable since this tool is used as a primary maneuver trainer as opposed to a sustainment training device. "Computer simulations bear the same relationship to real war as the John Madden NFL Gameday computer game does to playing in the NFL. They're better then nothing, but they do not make you a player." [120] In 365 days of training, this unit spent 38 days on company and above collective training; 120 days on platoon and below training; and 107 days on non-training missions. The unit fulfilled the requirement for one criterion. [121]

CRITERION	3-8 Cavalry, 1st Cavalry Division
CALFEX	NO
EXEVALs/CTC	YES/YES
SUSTAINMENT	NO
MULTI-ITERATIONS	NO

This disparity of training focus, which will be discussed in the conclusion, is based on unit mission requirements, resource allocation, and OPTEMPO.

This chapter clearly identifies the deficiencies, in company combined arms training, that are preventing the warfighting development of company commanders. It quantitatively proves the disparity of training focus that exists between the units analyzed in this monograph. This disparity of training focus, which will be further discussed in the concluding chapter, is based on unit mission requirements, resource allocation, and OPTEMPO. These elements have a combined effect that impacts the warfighting development of company commanders.

The final chapter concludes with a study of the elements that effect company training strategies, recommends a successful training strategy based on analysis contained in Chapter IV, and answers the question: Are company commanders being trained to fight a mid to high intensity combined arms battle?

V. CONCLUSIONS

"It will be organized, trained, and equipped primarily for prompt and sustained combat incident to operations on land. It is responsible for the preparation and sustainment of land forces necessary for the effective prosecution of war..."[122]

Today, training is severely impacted by the effects of diminishing resources and current OPTEMPO. If "the battlefield is the epitome of war," then is it unreasonable to assume that U.S. Army training should be focused at mastering the tasks that will allow us to be successful on the battlefield? [123] The purpose of this chapter is threefold. First there is a need to answer the question: Are current company commanders prepared to fight a mid to high intensity combined arms battle? Second is the need to discuss issues conflicting with the resources and time to conduct training. Finally, is the need to recommend measures that can lead to the successful training strategies that will prepare company commanders to execute those critical tasks outlined in chapter II.

A. Are Company Commanders Being Trained to Fight a Mid to High Intensity Combined Arms Battle?

The answer is no; not in a standardized manner across the Army. The analysis presented in chapter IV highlights several extreme differences in training programs that exist within the Army today. These differences are based on unit mission and training focus and affect the empirical development of company commanders. The unit training focus, company command tour length, and operations that take focus away from combined arms training hampers company commander combat leader skill development.

Units that have a rapid deployment or wartime METL focus are meeting the minimum standards in preparing their company commanders to fight a mid to high intensity combined arms battle. This occurs on a case by case basis and is extremely vulnerable to resource constraints and OPTEMPO requirements. Peace operations remain a valuable option in the support of National interests and provide a challenging, leader-intensive environment. However, they complicate company commander proficiency by consuming time that otherwise could be spent on combined arms training.

Chapter IV also illuminates the disappointing predicament of mechanized forces and their lack of resources, requirement for crew proficiency, and failure to conduct combined arms training on more then an annual basis. In fact, out of the four principles of training highlighted in chapter II, the mechanized battalions studied only met the standard for one: They routinely practiced performance-oriented training, although the majority of this was at the crew and platoon level. [124]

B. Current Resourcing and OPTEMPO Issues

"As you look at our Defense Department Budgets, this fiscal year 1999 budget represents the 14th consecutive year of decline in defense spending. In real dollars this budget represents $3 billion less than current levels and about a 40% drop from the spending levels in the mid to late 1980's."[125] Compounding the problem is the fact that monies to finance contingency missions are being taken directly out of operations and maintenance funds. [126] This is further exacerbated by partial reimbursements for funds spent during these contingency missions. [127] "Unfortunately, [congress doesn't] give us the money to take care of our families, to take care of our posts, and so commanders... have taken [training] money and funded quality of life... training is subsidizing base operations." [128]

Installation commanders have been forced to "migrate" funds from training to installation repairs and maintenance. [129] This has the net effect of reducing quality training time. [130] A 1997 RAND study on company performance at the NTC found that "since the Army has been forced to slash the money it gives units to prepare for NTC rotations by roughly 1/3... units no longer have the money to train above the company level at home station." [131] This lack of homestation training, "coupled with units so short of troops they cannot be employed according to doctrine, has implications that go beyond the obvious short-term readiness problems." [132] "Leaders at the NTC are unanimous in their view that units are arriving here at a much lower entry-level then they were just a few years ago." [133]

C. OPTEMPO

"We need to be very careful that this [peace operations] does not become our way of life; that we remember that we are first and foremost to fight our nation's wars." [134]

"From 1989 to 1996 the number of Army soldiers on active duty has decreased from 781,000 to 495,000. During this time, there have been 25 major deployments. Yet from 1950 to 1989 there were only 10 major deployments including the Korean and Vietnam wars." [135] These deployments include peace operations. Although the Army "participated in only two operations that can be cast even in the broadest terms as peace operations during the 44 years of the cold war (in the Dominican Republic and Egypt), there have been six such operations (Iraq, Somalia, Haiti, Macedonia, and Bosnia, in addition to MFO Sinai) in the past seven years alone." [136]

In his article, "Operations other than War and their Ramifications for U.S. Military Capability," Colonel Richard L. Strube asks the question: "In a military already reduced to the absolute minimum believed necessary to carry out the national military strategy, why do we divert so much of that minimal force to activities other than war preparedness?" [137] Army Vice Chief of Staff General William W. Crouch said that the Army "is doing more than ever before with fewer personnel... stretching to sustain combat capabilities while developing new skills required to shape the global environment." [138]

The question that remains is: What effect does training for, and participating in, peace operations have on the U.S. Army's preparedness for war. The short answer is that forces deployed to peace operations are, for the most part, failing to conduct company combined arms collective training. "Traditional peacekeeping operations; such as those ongoing in the Sinai and in Macedonia, involve significantly different operating conditions than can be expected in war, and many combat skills cannot be exercised. In the Sinai, for example, U.S. battalion-size light infantry units are assigned to the MFO for six month rotations to operate checkpoints and observation posts and conduct reconnaissance patrols in security zones within... training for many combat skills, particularly at the company level and above, is prohibited under the terms of the U.S. participation in the MFO." [139]

A Bradley (mechanized infantry) company commander who recently redeployed from Bosnia commented that his troops were well practiced in their Bosnia mission, "but when it comes to attacking a position, or holding a piece of terrain against an assault, that's where we'll need work." [140]

The effect of peace operations on U.S. Army units "can be dispersed beyond units that have deployed, are preparing to deploy, or have returned from deployment. Cross-leveling and interruptions of collective training affect stay-behind units as well." [141] This "three for one" requirement to have one unit training for, one unit executing, and one unit resourcing (with equipment and personnel fillers) the unit currently deployed, is preventing the doctrinal execution of combined arms training. [142] Army senior leaders indicate that units can not train for both peace operations and combat operations. "If the Army prepares for Peace Operations and then cannot fight a war, it assumes a risk at a higher order of magnitude... combat capabilities given up now might take years, even decades, to rebuild." [143]

Current company command tours average fourteen to eighteen months. [144] This tour length constrains the amount of time spent on collective training and gaining proficiency on those critical tasks identified in chapter IV. There simply is not a lot of time to train on tasks other then combined arms METL tasks. This tour length is effectively placing a premium on the amount and type of training a company commander experiences during his command tour. Peace operations deployments and mission and support cycles effectively combine to reduce the amount of empirical development a company commander receives. "Many armor and mechanized infantry [Company commanders] (approximately one-fourth to one-third) never get a chance to participate in an NTC or similar CTC..."[145]

D. It is a Dynamically-Complex System

Webster's defines a system as: a set or arrangement of things so related or connected as to form a unity or organic whole" [146] Peter Senge, in his book The Fifth Discipline, defines dynamic complexity as: situations where cause and effect are subtle, and where the effects over time.. are not obvious." [147] Company commanders are just one part of a dynamically-complex system vulnerable to a training system deficient in structured learning.

Former acting Secretary of the Army, Mike Walker commented in a letter to the Secretary of Defense that long-term readiness was at stake "because today's junior officers and NCOs no longer execute the full training strategy, they will lack necessary experience when they are battalion and brigade commanders in the future." [148] The following scenario highlights the potential implications that current training will have over time: A Infantry Second Lieutenant serves his first tour of duty in Germany. While stationed there for three years, he spends eight months involved in Bosnia (one month train-up, six month deployment, one month recovery). Out of the twenty-eight remaining months, he maneuvers his platoon, as a part of a company combined arms exercise, twice.[149] Upon returning to CONUS and attending his advanced course, he is assigned to the 1st Cavalry Division and immediately assumes command of a mechanized infantry company. During his fourteen months of command, he participates in one gunnery exercise (where he observes his platoons maneuver), and a six month deployment to Kuwait. As he is approaching his eighth year of service, he has participated in two company combined arms training exercises, all as a platoon leader.

Is this hypothetical situation extreme? No, and unfortunately CPT Smith is not alone.[150] Colonel Richard Geier, director for the Army Armor school, substantiates this scenario: "You talk to the folks that have come from Germany, and some of them, in the three years they were assigned to a tank battalion in Germany, didn't even qualify their tank."[151] One third to one fourth of the captains in his year group have had similar training experiences.[152] Even those who were lucky to serve in units well resourced, and mission focused, participated in peace, humanitarian assistance, and other operations that prevented them from conducting combined arms training. What happens when CPT Smith's year group becomes battalion commanders? Are they prepared to fight a combined arms battalion task force fight? Chances are their ability to command and control a unit as complex as a battalion task force is minimal at best.[153] "Because today's junior officers and NCOs no longer execute the full training strategy, they will lack the necessary experience when they are battalion and brigade commanders in the future."[154]

E. Recommended Training Strategy

Further analysis must be made to accurately determine the extent of combined arms training deficiency throughout the Army. This study should focus at the company and battalion level where the impact of inadequate training will have a long term affect. Analysis should be made using, at a minimum, the criteria in this monograph to help determine combined arms training deficiencies.

Effective training programs should resemble those programs modeled in the 82nd and 2ID. These strategies fulfill the minimum requirements of developing company commanders as combined arms warfighters.

In today's resource constrained training environment, this is obviously easier to say then do. Units that are not allowed to conduct collective training during deployments, coupled with inadequate resources, form training strategies focused at the crew, squad, and platoon level. [155] Now, this level of training focus is not all bad. The U.S. Army definitely needs proficient crews, squads, and platoons to effectively apply combat power at the decisive point. This focus has however, grown disproportionately prioritized at the expense of training at the company and battalion level.

As identified in chapter II, the company is the unit that brings the fight to the enemy. [156] This is where the effects of the combat multipliers is first put together to form an overwhelming effect on the enemy. This is how the U.S. Army doctrine says that it should fight and train to fight. [157] Unfortunately, the Army has over simplified its training strategy to meet operational and resource requirements. The resulting effect is that one-third to one-fourth of current company commanders are unprepared to fight their companies in a mid to high intensity combined arms battle. "In wartime mental mistakes become worse than crimes. In the long run intellectual unpreparedness loses wars; in the short run it leads to the demoralization and disintegration of whole armies. [158]

Appendix 1: METL tasks by ARTEP 7-10-MTP SEP 94 (Mission Training Plan for The Infantry Rifle Company)

Take Actions on Contact (5-16)

Execute Attack (5-20)

Perform overwatch/Support by fire (5-23)

Execute Assault (5-42)

Perform Airborne Assault (5-45)

Execute Defense (5-65)

Employ Fire Support (5-128)

Breach an Obstacle (5-132)

Defend against Air Attack (5-156)

Perform Combat Service Support Operations (5-159)

Treat and Evacuate Casualties (5-168)

METL tasks by ARTEP 71-1-MTP OCT 97 (Mission Training Plan for The Tank and Mechanized Infantry Company and Company Team)

Execute actions on contact (5-24)

Support by Fire (5-27)

Attack by fire (5-29)

Assault an enemy position (5-31)

ENDNOTES

[1] U. S. Army, FM 25-100, Training the Force, (Washington D.C., Headquarters Department of the Army, 1988), p. 1-1

[2] For descriptions of the combined arms training experience that evolved from the doctrinal adoption of the Airland Battle see U. S. Army, FM 25-100, Chapter 1. U. S. Army, FM 25-101, Battle Focused Training, (Washington D.C., Headquarters Department of the Army, 1990), Chapters 1,4, Appendix D. Fred Franks and Tom Clancy. Into the storm. (New York: G.P. Putnam's Sons, 1997) pages 84-118. TRADOC Pamphlet 525-100-1, Leadership and Command on the Battlefield, (Fort Monroe, VA, Headquarters United States Army Training and Doctrine Command, 1992), pages 35-36. TRADOC Pamphlet 525-100-2, Leadership and Command on the Battlefield, (Fort Monroe, VA, Headquarters United States Army Training and Doctrine Command, 1993), pages 49-52. Anne W. Chapman. The National Training Center Matures, 1985-1993. (Fort Monroe, VA: Office of the Command Historian, United States Army Training and Doctrine Command, 1997), Chapter 2.

[3] Stanley Horowitz, et al. Unit Training in the Gulf War, (Alexandria, VA, Institute for Defense Analysis, 1995), pages VII – 3.

[4] Richard L. Strube Jr., "Operations Other Than War and Their Ramifications for U. S. Military Capability," Army, (January 1997), page 10.

[5] Jennifer Morrison Taw, et al. Meeting Peace Operations While Maintaining MTW Readiness, (Santa Monica, CA, RAND 1998), pages 32-34.

[6] Gregory Fontenot, Former Brigade Commander in Bosnia from December 1995 to December 1996 in a EMAIL message to Lieutenant Colonel Victor Roberson, subject: Peace Operations, 13 April 1998.

[7] U. S. Army, FM 22-100, Military Leadership, (Washington D.C., Headquarters Department of the Army, 1990), p. vii.

[8] FM 25-100, p. 4-7.

[9] Ibid, pages 5-2, D-2.

[10] Ibid, pages 1-6.

[11] Ward Keesling, et al. Determinants of Effective Performance Research on Measuring and Managing Unit Training Readiness, (Alexandria, VA, U. S. Army Research Institute for Behavioral and Social Sciences, 1994), pages 86-93. And FM 25-100, Training The Force, p. 1-4.

[12] Dandridge M. Malone, Small Unit Leadership. (Novato, CA, Presidio Press, 1983) p. 26.

[13] FM 25-100, p. fwd.

[14] Ibid.

[15] FM 25-101, p. 1-3.

[16] Ibid, page fwd.

[17] U. S. Army, FM 101-5-1, Operational Terms and Graphics, (Washington D.C., Headquarters Department of the Army, 1997), p. 1-33.

[18] Ibid.

[19] Ibid, page 1-36.

[20] U. S. Army, FM 100-5, Operations, (Washington D.C., Headquarters Department of the Army, 1993), p. 2-3.

[21] Ibid.

[22] FM 25-100, p. 1-3.

[23] Brigadier General James Dubik, "The Army's 2nd Training Revolution," Armed Forces Journal International, (December 1997), page. 36.

[24] FM 100-5, p. 2-10.

[25] Ibid.

[26] Ibid, page 2-11.

[27] Ibid.

[28] FM 25-101, defines CALFEXs, LFXs, and FTXs as: CALFEXs are high cost, resource intensive exercises in which player units move or maneuver and employ organic and supporting weapon systems using full service ammunition with attendant integration of **all** combat, CS, and CSS functions (p. G-2). LFXs are resource intensive exercises where player units maneuver and employ organic and supporting weapon systems … there principle focus is **unit** and weapons integration at **company team** level (p. C-9). FTXs are high cost, high overhead exercises conducted under **simulated combat** conditions in the field. It exercises **command and control** of all echelons in battle functions against actual or simulated **opposing forces** (p. G-4). [The Combat Training Center program is designed to achieve the highest level of FTX environment]. **Bold** is author's emphasis.

[29] Ibid, page 1-5.

[30] William F. Kernan and Colonel Daniel P. Bolger, "Train As We Fight," Infantry, (JAN-APR 1998), p.36.

[31] Ibid.

[32] U. S. Army, MTP 7-10, Mission Training Plan For The Infantry Rifle Company, (Washington D.C., Headquarters Department of the Army, 1992), p. 1-6.

[33] FM 25-101, p. 1-5.

[34] FM 25-100, p. 1-4.

[35] Ibid.

[36] FM 25-101, Battle Focused Training, defines FSCXs, and TEWTs as: FS[C]Xs are medium cost, reduced scale exercises that can be conducted at platoon, company team, or battalion task force level. It exercises **command and control** skills through the integration of all **organic weapon** systems, as well as **indirect and supporting fires**. Weapon densities may be reduced for participating units, and subcaliber devices substituted for service ammunition (p. G-4). TEWTs are low cost, low overhead exercises conducted in the field on actual terrain suitable for training units for specific missions. It is used to **train** subordinate **leaders** and battle staffs on terrain analysis and unit and weapons emplacement. It also trains on **planning** the execution of the unit mission (p. G-8). Simulations provide leaders effective training **alternatives** when maneuver and gunnery training opportunities are limited. When used properly, simulations can create the environment and **stress of battle** needed for effective command and battle staff training... simulations can help build battle staff and **leader flexibility** and **responsiveness** (p. E-2) **Bold** is author's emphasis.

[37] FM 25-100, p. 1-7.

[38] Ibid, p. 2-1.

[39] See ARTEP-MTP 7-10, Mission Training Plan For The Infantry Rifle Company, pages 5-4 to 5-5 lists 45 different tasks that the Infantry Rifle Company may be tasked to perform. And U.S. Army, ARTEP-MTP 71-1, Mission Training Plan For The Tank and Mechanized Infantry Company And Company Team, (Fort Knox, KY., U.S. Army Armor Center and School, Initial Draft 1997), page 5-4 lists 39 different tasks that the tank and mechanized infantry company and company team must perform.

[40] FM 25-100, p. 1-10.

[41] ARTEP-MTP 7-10, Chapter 5.

[42] Ibid, page v.

[43]Strube, page 10.

[44] Bryan W. Hallmark,. Company Performance at the National Training Center: Battle Planning and Execution. (Santa Monica, CA, RAND, 1997) page 1.

[45] Ibid, p. 4.

[46] Ibid.

[47] FM 22-100, p. 1-3.

[48] Ibid.

[49] FM 100-5, p. 2-9.

[50] See ARTEP-MTP 7-10, Chapter 5. And ARTEP-MTP 71-1, Chapter 5.

[51] Lieutenant General William F. Kernan, Commanding General of XVIII Airborne Corps in a EMAIL message to the author, subject: Leader Training, 1 July 1998.

[52] FM 25-101, p. C-2.

[53] See Ibid, p. 4-7 and memorandum dated 28 September 1993, (Fort Campbell KY, Headquarters 101st Airborne Division (Air Assault) and Fort Campbell), subject: CG's Training Note # 2, Eagle Warrior. Then Major General John M. Keane directs that "maneuver units [standard for training] should be the performance of the [METL} task as a night live fire exercise." And Colonel Daniel P. Bolger, Commander, 2nd Brigade, 2nd Infantry Division, in a EMAIL message to the author, subject: Collective training, 27 OCT 1998. When asked what it takes for a company commander to become proficient at combined arms warfighting, COL Bolger states: "I think there are three things [company commanders] must do TO STANDARD (emphasis is COL Bolger's) not just once, but till you get it right: 1. You have to be able to do a night live fire attack with full supporting fires… 2. You have to be able to find, fight, and beat an uncooperative OPFOR in force on force. 3. You have to do both 1 and 2 to standard more than once to prove it wasn't just luck or coincidence. Multiple iterations (at least two "Gos") are essential. And FM 23-1, Bradley Gunnery, chapters 12 and 15. FM 23-1 details the requirement for night live fire qualification for crews and platoons.

[54]Taw, pages 32-34.

[55] FM 25-100, p. 4-7.

[56] See Department of the Army Pamphlet 350-38, Standards in Weapons Training, (Washington D.C., Headquarters Department of the Army, 1997), pages. 5, 16, 71, 83, 86. And 82nd Airborne Division Training Directive, 350-1, (Fort Bragg, Headquarters 82nd Airborne Division, 1998) p. 3-6) Inherent in the execution of a night CALFEX is the requirement for the unit and leader to demonstrate proficiency on the tasks to be executed prior to the night CALFEX. This is accomplished through the conduct of day blank and live fire rehearsals and night blank fire rehearsals prior to executing the CALFEX to standard.

[57] An analysis of STRAC requirements and the 82nd Airborne Division Training Directive determines the following requirements:

UNIT TYPE	STRAC REQUIREMENT	82ND REQUIREMENT	TABLE/PAGE #
M1A1/A2 TANK BN TRC A	1 CALFEX ANNUALLY	NA	2-17/16
M2 BN TRC A	1 CALFEX ANNUALLY	NA	5-6/71
LIGHT INFANTRY COMPANY	NA	1 CALFEX ANNUALLY	3-6/3-10
60mm MORTAR CREWS TRC A	1 CALFEX ANNUALLY	2 LFX EXEVALS PER YEAR	5-25/83 3-4/3-8
M60/M240B TRC A	1 CALFEX ANNUALLY	2 LFX EXEVALS PER YEAR	5-29/86

Based on the requirements listed in this table, I have determined that the criterion should be quantified using one CALFEX per company, per year, as the standard of measure for this training strategy.

[58] FM 25-101, p. D-1.

[59] Anne W. Chapman. The National Training Center Matures, 1985-1993. (Fort Monroe, VA: Office of the Command Historian, United States Army Training and Doctrine Command, 1997), p.2.

[60] Ibid, Introduction.

[61] TRADOC Pamphlet 525-100-2, p. 51.

[62] Ibid.

[63] Sean D. Naylor. "The NTC: Facing New Challenges," Army Times, 6 July 1998, p.12.

[64] Brigadier General Sam Thompson, Commanding General of the Joint Readiness Training Center, in a EMAIL message to the author, subject: Leader Training, 28 June 1998. BG Thompson states that "It is the CSAs [Army Chief of Staff] policy that all battalion commanders participate in a CTC rotation during their command tour." The exception to this is for commanders stationed in Korea or unable to attend due to real world deployments.

[65] See 82nd Airborne Division Training Directive, 350-1, p. 3-6, and 101st Airborne Division (Air Assault) Training Directive, 350-1, (Fort Campbell KY, Headquarters 101st Airborne Division (Air Assault), 1992) p. 6-1)

[66] Department of the Army Pamphlet 350-38, p. 72.

[67] An analysis of STRAC requirements and the 82nd and 101st Division's Training Directive determines the following requirements:

UNIT TYPE	STRAC REQUIREMENT	82ND / 101st REQUIREMENT	TABLE/PAGE #
M1A1/A2 TANK BN TRC A	NA	NA	2-17/16
M2 BN TRC A	2 EXEVALS ANNUALLY	NA	5-6/71
IN BN	NA	82ND – 1 PER COMMAND TOUR 101ST – 1 PER 18 MONTHS	3-6/310 NA/6-1
LIGHT INFANTRY COMPANY	NA	1 EXEVAL ANNUALLY	3-6/3-10 NA/6-1
60mm MORTAR CREWS TRC A	1 CALFEX ANNUALLY	2 LFX EXEVALS PER YEAR	5-25/83 3-4/3-8
M60/M240B TRC A	1 CALFEX ANNUALLY	2 LFX EXEVALS PER YEAR	5-29/86

Based on the requirements listed in this table, I have determined that the criterion should be quantified using one EXEVAL per company, per year, as the standard of measure for this training strategy. A CTC rotation fulfills the requirement for one EXEVAL.

[68] See 82nd Airborne Division Training Directive, 350-1, p. 3-10, and 101st Airborne Division (Air Assault) Training Directive, 350-1, (Fort Campbell KY, Headquarters 101st Airborne Division (Air Assault), 1992) p. 6-1).

[69] See note 17.

[70] See 82nd Airborne Division Training Directive, 350-1, chapter 2. This training directive establishes a six week training cycle system. Maneuver units spend six weeks in a training cycle, six weeks in a mission cycle, and six weeks in a support cycle. And 101st Airborne Division (Air Assault) Training Directive, 350-1, chapter 2. Maneuver units spend six weeks in a training cycle, six weeks in a mission cycle, and six weeks in a support cycle.

[71] Ward Keesling, et al. Determinants of Effective Performance Research on Measuring and Managing Unit Training Readiness, (Alexandria, VA, U. S. Army Research Institute for Behavioral and Social Sciences, 1994), p. 21.

[72] James A. Roth, Development of a Methodology for Collective Training Decision Making in Army Units, (Alexandria, VA, U. S. Army Research Institute for Behavioral and Social Sciences, 1992), p. 2.

[73] See 82nd Airborne Division Training Directive, 350-1, p. 3-15. The 82nd requires all Infantry units to conduct a fire support coordination exercise prior to assuming mission cycle.

[74] FM 25-101, p. E-2.

[75] Ibid.

[76] Quantification of this criterion is somewhat subjective. Unit training directives (82nd and 101st) state that the focus of support and mission cycles should be small unit and individual training. They do not dictate what type or method to use.

[77] See Keesling, p. 95. And Rick Bogdan, ed., Joint Readiness Training Center Trends Compendium 4QFY96 through 3QFY97, (Center For Army Lessons Learned, U. S. Army Training and Doctrine Command, Fort Leavenworth, KS). And Rick Bogdan, ed., National Training Center Trends Compendium 3QFY96 through 2QFY97, (Center For Army Lessons Learned, U. S. Army Training and Doctrine Command, Fort Leavenworth, KS).

[78] Hallmark, p. 58. Hallmark developed this graphic representation of the four different learning stages.

[79] Carl Von Clausewitz, On War, (Princeton University Press, Princeton, NJ, 1976) p. 102.

[80] Quantification of this criterion is somewhat subjective. Unit training directives (82nd and 101st) do not state which METL tasks will be trained on during training cycles. The decision is subjective based on each commander's assessment of where, and at what level, the training should focus. Repetition therefore, occurs on a case by case basis that is primarily dependent on what future real world deployments will occur or what major training event is forthcoming. They critical issue this criterion addresses, is the need for the company commander to repeatedly execute those leader tasks, outlined in chapter II, both during and in between major training cycles. This facilitates the commander's climb towards proficiency and prevents the

[81] 1st Brigade, 82nd Airborne Division, Master Training Calendar, as of September 15 1998.

[82] Ibid.

[83] 82nd Airborne Division Training Directive, 350-1, p. 2-3.

[84] Ibid, pages 2-3 to 2-4.

[85] Ibid, page 3-10.

[86] Weather and contingency missions affect the participation of combat multipliers.

[87] Lieutenant Colonel Don Clarke, Commander, 1-325th PIR, in a EMAIL message to the author, subject: Collective training, 13 NOV 1998. And Captain Brian Allin, A/S3 (subsequently S4) 2-505 PIR, in EMAIL to the author, subject: Collective Training, 2, 3, 5, 6 November 1998.

[88] Captain Brian Allin, A/S3 (subsequently S4) 2-505 PIR, in EMAIL to the author, subject: Collective Training, 2, 3, 5, 6 November 1998.

[89] 82nd Airborne Division Training Directive, 350-1, p. 3-15.

[90] 1st Brigade, 82nd Airborne Division, Master Training Calendar, as of September 15 1998.

[91] Lieutenant Colonel Don Clarke, Commander, 1-325th PIR, in a EMAIL message to the author, subject: Collective training, 13 NOV 1998. 1st Brigade, 82nd Airborne Division, Master Training Calendar, as of September 15 1998.

[92] Lieutenant Colonel Don Clarke, Commander, 1-325th PIR, in a EMAIL message to the author, subject: Collective training, 13 NOV 1998. And Captain Brian Allin, A/S3 (subsequently S4) 2-505 PIR, in EMAIL to the author, subject: Collective Training, 2, 3, 5, 6 November 1998.

[93] 82nd Airborne Division Training Directive, 350-1, pages 1-3 and 3-13.

[94] Weather and contingency missions affect the participation of combat multipliers.

[95] This exercise is a combined arms mission based on METL task(s). It occurs during the time (mission and support cycles) when sustainment training normally is scheduled. Because it is a fully resourced combined arms event, it provides a better training experience then TEWTs or simulations.

[96] FM 25-101, p. 1-5.

[97] Colonel Daniel P. Bolger, Commander, 2nd Brigade, 2nd Infantry Division, in a EMAIL message to the author, subject: Collective training, 27 OCT 1998.

[98] Lieutenant Colonel Michael Linnington, Commander, 1-503rd IN, in a EMAIL message to the author, subject: Toner Question (about training cycle system), 22 NOV 1998.

[99] See Colonel Daniel P. Bolger, Commander, 2nd Brigade, 2nd Infantry Division, in a EMAIL message to the author, subject: Collective training, 27 OCT 1998. And Lieutenant Colonel Michael Linnington, Commander, 1-503rd IN, in a EMAIL message to the author, subject: Toner Question (about training cycle system), 22 NOV 1998.

[100] Colonel Daniel P. Bolger, Commander, 2nd Brigade, 2nd Infantry Division, in a EMAIL message to the author, subject: Collective training, 27 OCT 1998.

[101] See Department of the Army FM 23-1, Bradley Gunnery, (Washington D.C., Headquarters Department of the Army, 1997), chapter 7.

[102] Colonel Daniel P. Bolger, Commander, 2nd Brigade, 2nd Infantry Division, in a EMAIL message to the author, subject: Collective training, 27 OCT 1998.

[103] Lieutenant Colonel Michael Linnington, Commander, 1-503rd IN, in a EMAIL message to the author, subject: Collective Training, 01 NOV 1998.

[104] According to the 1-26 IN long range training calendar, dated as of 30 October 1998, the deployment to Macedonia caused the battalion to cancel a post CMTC retraining period.

[105] See 1-26 IN long range training calendar, dated as of 30 October 1998. And FM 23-1, p.6-21.

[106] 1st Battalion, 26th Infantry Regiment, 1st Infantry Division, Fourth Quarter, FY 98 Training Guidance, dated 10 May 1998.

[107] 1-26 IN long range training calendar, dated as of 30 October 1998.

[108] Captain Charlie Hansell, S4, 1-26 IN, in a EMAIL message to the author, subject: Information, 18 SEP 1998.

[109] Ibid.

[110] 1-26 IN long range training calendar, dated as of 30 October 1998.

[111] SIMNET sustains the following critical skills: Plan and coordinate direct fire; Plan and coordinate indirect fire; Plan and coordinate employment of Attack helicopters and CAS; Integrate combat engineer assets; Integrate Air Defense Artillery assets; Plan and coordinate resupply and casualty evacuation.

[112] SIMNET is currently scheduled quarterly.

[113] 1st Battalion, 26th Infantry Regiment, 1st Infantry Division, Fourth Quarter, FY 98 Training Guidance, dated 10 May 1998.

[114] 3-8 CAV, 1st Cavalry Division, long range training calendar, dated as of 05 August 1998.

[115] Ibid.

[116] Ibid. And Captain Don Brown, A/S3, 3-8 CAV, in a EMAIL message to the author, subject: Training Schedules, 10 AUG 1998.

[117] 3-8 CAV, 1st Cavalry Division, long range training calendar, dated as of 05 August 1998.

[118] Captain Don Brown, A/S3, 3-8 CAV, in a EMAIL message to the author, subject: Training Schedules, 10 AUG 1998.

[119] 3-8 CAV, 1st Cavalry Division, long range training calendar, dated as of 05 August 1998.

[120] Colonel Daniel P. Bolger, Commander, 2nd Brigade, 2nd Infantry Division, in a EMAIL message to the author, subject: Collective training, 27 OCT 1998.

[121] 1st CAV Tng calendar. An examination of the calendar two months prior to and 12 months after the NTC rotation revels that there was no pre-NTC company level collective training and no post-NTC retraining conducted.

[122] See Army Mission and Vision Statement, U.S. Army homepage, www.army.mil/mission-vision.htm.

[123] S.L.A. Marshall, Men Against Fire, (Gloucester, MASS, 1978), p. 27.

[124] See Chapter IV, unit training for 1-26 IN, 1st ID (FWD) and 3-8 Cavalry, 1st Cavalry Division.

[125] Senator Chuck Hagel, "Increase defense Spending," AUSA News, volume 20, number 11, September 1998, p. 10.

[126] Bruce B Auster, "Another hollow Army?," U.S. News and World Report, November 15 1998, p. 50.

[127] David A. Fastabend, "Constabulary Force: Home Remedy for "Potentially Crippling" Crisis," Army, August 1998, p. 8.

[128] Sean D. Naylor, "We need more money for homestation training," Army Times, 6 July 1998, p.3.

[129] Sean D. Naylor, "Budget is hurting the Army," Army Times, July 27 1998, p. 3.

[130] U.S. General Accounting Office. "Peace Operations: Effect of Training, Equipment and Other Factors on Unit Capability," Report Number NSIAD-96-14,. Washington, D.C.: GAO, October 1995, p. 2. The GAO report states that " the Army asks for 800 [tank/bradley] miles per year... however since 1992, [the Army] operates at about 642 miles per vehicle per year. [The delta] is obliged to fund other activities."

[131] Hallmark, page 3.

[132] Sean D. Naylor. "The NTC: Facing New Challenges," Army Times, 6 July 1998, p.12. Naylor interviewed Brigadier General (P) Dean Cash, NTC commander, Colonel J.D. Thurman, chief of the NTC operations group, Colonel Guy Swan, OPFOR commander, and various observer/controllers in his article for the Army Times.

[133] Ibid.

[134] Steve Komarow, "Shalikashvili Reshaping Strategy," USA Today, May 13 1996, pages 1, 13.

[135] Taw, p. 4.

[136] Ibid, p. 5.

[137] Strube, p. 10.

[138] Mary Blake French, ed., "Congress Questions Army Readiness," Army, April 1998, p. 8.

[139] U.S. General Accounting Office. "Peace Operations: Effect of Training, Equipment and Other Factors on Unit Capability," Report Number NSIAD-96-14,. Washington, D.C.: GAO, October 1995, p. 31.

[140] Mike O'Connor, "Does Keeping the Peace Spoil G. I.'s for War?," The New York Times, December 13, 1996, p.1.

[141] Taw, p. 4.

[142] Fastabend, p. 9.

[143] Taw, p. 6.

[144] Hallmark, p. 53.

[145] Ibid, p. 49.

[146] David B. Guralnik, ed., Webster's New World Dictionary, p. 1445.

[147] Peter M. Senge, The Fifth Discipline, Doubleday, New York, New York, 1990, p. 71.

[148] Sean D. Naylor, "Budget is hurting the Army," Army Times, July 27 1998, p. 3. Naylor quotes a memo sent from then acting Secretary of the Army, Mike Walker to Secretary of Defense William Cohen, dated 22 May 1998.

[149] See Chapter IV, 1-26 IN training summary.

[150] This comment is based on the author's brother-in-law, Captain Todd Crosbie, and his experience as a junior officer. Captain Crosbie, although a Army signal officer, serves as the model for this scenario. Captain Crosbie deployed to Bosnia as a platoon leader with the 1st Infantry Division, and then to Kuwait with the 1st Cavalry Division (all within two years).

[151] Sean D. Naylor, "We need more money for homestation training," Army Times, 6 July 1998, p.3.

[152] Hallmark, p. 49.

[153] Colonel Daniel P. Bolger, Commander, 2nd Brigade, 2nd Infantry Division, in a EMAIL message to the author, subject: Collective training, 27 OCT 1998. Colonel Bolger states: "I think you have a great topic [referring to the title for this monograph]. In fact, it really is the most important question we could ask. If we screw this up, our battalions will be led by ill-trained guys in less than ten years. The Army of 2008 won't be in good shape unless the answer is yes."

[154] Sean D. Naylor, "Budget is hurting the Army," Army Times, July 27 1998, p. 3.

[155] See U.S. General Accounting Office. "Peace Operations: Effect of Training, Equipment and Other Factors on Unit Capability," Report Number NSIAD-96-14,. Washington, D.C.: GAO, October 1995, pages, 28-29. And Senator Chuck Hagel, "Increase defense Spending," AUSA News, volume 20, number 11, September 1998, p. 10. And Sean D. Naylor. "The NTC: Facing New Challenges," Army Times, 6 July 1998, p.12.

[156] *See Chapter II, p. 11. The company commander is responsible for directing and controlling the maneuver, direct fire, and indirect fire assets organic and attached to his company. And the quote on page 5:* "Captains – fight… that's who delivers upon the enemy the combat power that the upper levels have put together." [12]

[157] FM 25-101, p. E-2.

[158] James J. Schnider, "How War Works: The Origins, Nature, and Purpose of Military Theory," School of Advanced Military Study, United States Army Command and General Staff College, 16 June 1995, p. 3.

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